DERWENT-ACC-NO: 2001-149246
DERWENT-WEEK: 200134

TITLE: Chemically modified fluorinated polymers useful as binders in the fabrication of electrodes for lithium-ion batteries, made by treating a partially dehydrofluorinated fluorinated polymer with an oxidising agent

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PATENT-FAMILY:

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EP 1054023 A1	November 22, 2000	F	015	C08F 008/06
KR 2000077363 A	December 26, 2000	N/A	000	C08F 114/00
	November 21, 2000	F	000	C08F 008/26
CA 2308988 A1	December 6, 2000	N/A	000	C08F 114/22
CN 1275581 A	January 16, 2001	N/A	010	C08F 008/06
JP 2001011115 A				

DESIGNATED-STATES: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK N L PT RO SE SI

APPLICATION-DATA:

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EP 1054023A1	N/A	2000EP-0401260	May 9, 2000
KR2000077363A	N/A	2000KR-0027269	May 20, 2000
CA 2308988A1	N/A	2000CA-2308988	May 18, 2000
CN 1275581A	N/A	2000CN-0118712	May 21, 2000
JP2001011115A	N/A	2000JP-0149663	May 22, 2000

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ABSTRACTED-PUB-NO: EP 1054023A
BASIC-ABSTRACT: NOVELTY - Chemical modification of fluorinated polymers by treating partially dehydrofluorinated polymer with an oxidising agent to give polymers with excellent adhesive properties.

DETAILED DESCRIPTION - Process for chemical modification of a fluorinated polymer (PF1) containing units of formula (I)

X and X' (same or different) = H; halogen, especially F or Cl; or perhalogenated, especially perfluorinated alkyl

comprises subjecting the fluorinated polymer to a partial dehydrofluorination by treatment with a base and then reacting the partially dehydrofluorinated polymer with an oxidising agent to give a new fluorinated polymer (PF2).

USE - The modified fluoropolymers are especially useful as binders for particles of mixed oxides in the fabrication of the active layer of the positive electrode of lithium-ion batteries (claimed).

ADVANTAGE - The modified polymers give active layers for battery electrodes having both good cohesion of the layer and good adhesion of the layer to the metallic collector. The polymers have good solubility in solvents such as dimethylformamide and N-methylpyrrolidone to facilitate their use in the fabrication of composite electrodes whilst being unaffected by the oxidation-reduction reactions occurring during charge and discharge of the battery, and by the electrolytes used in this type of battery, consisting typically of a solvent such as ethylene- or propylene carbonate and a Li salt such as LiPF6 or LiBF4.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS:
CHEMICAL MODIFIED FLUORINATED POLYMER USEFUL BIND FABRICATE ELECTRODE LITHIUM
ION BATTERY MADE TREAT FLUORINATED POLYMER OXIDATION AGENT

DERWENT-CLASS: A14 A85 L03 X16

CPI-CODES: A04-E10; A10-E04; A10-E11; A12-E06A; L03-E01B5;

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ENHANCED-POLYMER-INDEXING:
Polymer Index [1.1]
018 ; G0022*R D01 D51 D53 D12 D10 D58 D59 D69 D82 7A*R F* 7A Cl ; H0000 ; H0011*R ; M9999 M2131 ; L9999 L2391 ; L9999 L2131 ; M9999 M2437*R ; L9999 L2437*R ; S9999 S1025 S1014 ; M9999 M2802 ; L9999 L2802
Polymer Index [1.2]
018 ; R00363 G0555 G0022 D01 D12 D10 D51 D53 D58 D69 D82 F* 7A ; H0000 ; S9999 S1025 S1014 ; M9999 M2131 ; M9999 M2437*R ; M9999 M2802 ; L9999 L2391 ; L9999 L2802 ; L9999 L2131 ; L9999 L2437*R
Polymer Index [1.3]
018 ; ND01 ; ND06 ; Q9999 Q7341 Q7330 ; Q9999 Q7409 Q7330 ; Q9999 Q6791 ; B9999 B5301 B5298 B5276 ; K9483*R ; K9676*R ; K9712 K9676 ; Q9999 Q7114*R ; B9999 B5630 B3510 B3372 ; B9999 B4580 B4568 ; B9999 B4626 B4568

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